

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	1754	(257/81,82,99).CCLS.	USPAT; USOCR	OR	OFF	2006/12/21 15:54
L3	1953	(438/22,24).CCLS.	US-PGPUB; USPAT; USOCR; JPO; DERWENT	OR	OFF	2006/12/21 15:43
L4	768	(438/26,27).CCLS.	US-PGPUB; USPAT; USOCR; JPO; DERWENT	OR	OFF	2006/12/21 15:43
L5	3976	(257/81,82,99).CCLS.	US-PGPUB; USPAT; USOCR; JPO; DERWENT	OR	OFF	2006/12/21 16:07
L6	2	("20020070449").PN.	US-PGPUB; USPAT; USOCR; JPO; DERWENT	OR	OFF	2006/12/21 16:16
L7	195	(light adj emi\$6 adj element) with (second adj substrate)	US-PGPUB; USPAT	OR	OFF	2006/12/21 16:24
L8	248	(light adj emi\$6 adj element) same (second adj substrate)	US-PGPUB; USPAT	OR	OFF	2006/12/21 16:33
L9	287	(257/84).CCLS.	USPAT; USOCR	OR	OFF	2006/12/21 16:33
L10	347	(257/84).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/12/21 16:48
L11	1	("20020175339").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/12/21 17:27
L12	173	(light adj emitting adj diode) same (second adj substrate)	US-PGPUB; USPAT; FPRS	OR	OFF	2006/12/21 18:18
L13	0	(light adj emitting adj diode) same (second adj substrate) same ESD	US-PGPUB; USPAT; FPRS	OR	OFF	2006/12/21 18:12
L14	173	(light adj emitting adj diode) same (second adj substrate)	US-PGPUB; USPAT; FPRS	OR	OFF	2006/12/21 18:12
L15	66	(light adj emitting adj diode) same (ESD)	US-PGPUB; USPAT; FPRS	OR	OFF	2006/12/21 18:24

## EAST Search History

L16	146	(direct adj copper adj bonding)	US-PGPUB; USPAT; FPRS	OR	OFF	2006/12/21 18:24
L17	103	"257"/\$.ccls. and (direct adj copper adj bonding)	US-PGPUB; USPAT; FPRS	OR	OFF	2006/12/21 18:24
S1	2617	(257/690-690,730-733).CCLS.	USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/14 14:21
S2	2398	(LED) and (copper with substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 13:55
S3	129	(LED) and (copper with substrate) and (second adj substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 14:23
S4	1780	(257/99).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 14:38
S5	11	257/99.ccls. and (copper) and (second adj substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/11 09:53
S6	12	257/79-103.ccls. and (copper with ceramic with substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 17:16
S7	11	257/79-103.ccls. and (LED with (second adj substrate))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 17:45
S8	5	"257"/\$.ccls. and ((light adj emitting adj diode) with (second adj substrate) with (first adj substrate))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 17:52

## EAST Search History

S9	34	((light adj emitting adj diode) with (second adj substrate))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/10 17:52
S10	241	257/99.ccls. and (copper)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 15:53
S11	32	257/79-103.ccls. and (copper) and (second adj substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/11 10:47
S12	2	("4012833").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/08/11 10:48
S13	58354	(light adj emi\$4) and (copper saem substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 13:56
S14	2592	(light adj emi\$4) and (copper same substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 13:56
S15	75	(light adj emi\$4 adj device) and (copper same substrate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 14:21
S16	152	(light adj emi\$4 adj device) and (copper same (Al2O3 or AlN or Al or aluminum or SiN))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 15:08
S17	18	(light adj emi\$4 adj device) and (copper same (Al2O3 or AlN or Al or aluminum or SiN) same heat)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 14:24

## EAST Search History

S18	508	257/99,98,95,79,81.ccls. and (copper) and (aluminum or (aluminum adj oxide) or (Aluminum adj nitride) or (silicon adj nitride))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 15:13
S19	279	257/99,98,95,79,81.ccls. and ((copper).with (aluminum or (aluminum adj oxide) or (Aluminum adj nitride) or (silicon adj nitride)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 15:13
S20	43	257/99,98,95,79,81.ccls. and ((copper) with (aluminum or (aluminum adj oxide) or (Aluminum adj nitride) or (silicon adj nitride)) with (substrate))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 16:11
S21	65	"257"/\$.ccls. and ((copper) near (adhesion adj layer))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 16:39
S22	2	("20020175339").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/08/21 16:39
S23	3	"257"/\$.ccls. and ((LED) with ceramic with copper)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 14:28
S24	4045	"257"/\$.ccls. and (copper) and (alumina or aluminum or (silicon adj nitride) or (aluminum adj oxide) or (AlO) or (AlN)) and (light adj emi\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 15:56
S25	4045	"257"/\$.ccls. and (copper) and (alumina or aluminum or (silicon adj nitride) or (aluminum adj oxide) or (AlN)) and (light adj emi\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 15:57
S26	2248	"257"/\$.ccls. and ((copper) with (alumina or aluminum or (silicon adj nitride) or (aluminum adj oxide) or (AlN))) and (light adj emi\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 15:57
S27	221	"257"/\$.ccls. and ((copper) with (alumina or aluminum or (silicon adj nitride) or (aluminum adj oxide) or (AlN)) with substrate) and (light adj emi\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 16:40

## EAST Search History

S28	221	"257"/\$.ccls. and ((light adj emit\$4) with (second adj substrate))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 16:52
S29	0	"257"/\$.ccls. and ((light adj emitter) near3 (silicon adj nitride))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 16:53
S30	1	"257"/\$.ccls. and ((light adj emitter) with (silicon adj nitride))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 16:55
S31	2	("6480389").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 16:57
S32	501	"257"/\$.ccls. and ((light adj emit\$4) with (aluminum adj oxide or aluminum adj nitride or silicon adj nitride))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 17:00
S33	61	"257"/\$.ccls. and ((light adj emit\$4) near3 (aluminum adj oxide or aluminum adj nitride or silicon adj nitride))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 17:19
S34	3	"257"/\$.ccls. and ((light adj emit\$4) with (aluminum adj oxide or aluminum adj nitride or silicon adj nitride) with pad)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 17:00
S35	39	"257"/\$.ccls. and PCB with alumina	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 17:21
S36	143	"257"/\$.ccls. and ((printed adj circuit adj board) with alumina)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 19:23
S37	0	"257"/\$.ccls. and (ESD with diode with (Aluminum adj (nitride or oxide)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 19:25

## EAST Search History

S38	0	"257"/\$.ccls. and (ESD with diode with (silicon adj nitride))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 19:33
S39	14882	"257"/\$.ccls. and (Aluminum adj (oxide or nitride))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 19:34
S40	71	"257"/\$.ccls. and (Aluminum adj (oxide or nitride)) with (reflectiv\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 19:34
S41	0	"257"/\$.ccls. and (Aluminum adj (oxide or nitride)) with (good adj reflectiv\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/01 19:35
S42	36	"257"/\$.ccls. and (Aluminum adj (oxide or nitride)) with (reflectiv\$4) and (light aDJ EMIT\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/02 13:53
S43	2	("20040033647").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/05/02 13:53
S44	0	((aluminum\$1based) adj PCB) near3 alumina	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 10:35
S45	0	((aluminum\$1based) adj PCB) with alumina	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 10:35
S46	0	((aluminum adj based) adj PCB) with alumina	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 10:35
S47	1	((aluminum adj based) adj PCB)	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 10:51
S48	32	((alumina) near3 PCB)	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 11:05

## EAST Search History

S49	133	((((ceramic or alumina or (aluminum adj (oxide or nitride)))) near3 (substrate)) same (copper)) and (light adj emi\$6)	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 11:40
S50	8	("3049647"   "3098951").PN. OR ("4012833").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/12/20 11:38
S51	552	((((ceramic or alumina or (aluminum adj (oxide or nitride)))) and (substrate)) same (copper)) and (light adj emi\$6)	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 11:41
S52	245	((((ceramic or alumina or (aluminum adj (oxide or nitride)))) with (substrate)) same (copper)) and (light adj emi\$6)	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 12:16
S53	0	257/81,82,99	USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 13:11
S55	3974	(257/81,82,99).CCLS.	US-PGPUB; USPAT; USOCR; JPO; DERWENT	OR	OFF	2006/12/21 15:42
S56	270	257/81,82,99.ccls. and (copper) and ((aluminum adj (oxide or nitride)) or ceramic or (silicon adj nitride))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 16:39
S57	0	("20030111691").PN.	USPAT; USOCR	OR	OFF	2006/12/20 14:47
S58	1	("20030111691").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/12/20 14:47
S59	32	("20020004251"   "20020034834"   "20020163006"   "20020175621"   "20020176250"   "20030057421"   "20040026706"   "4886709"   "5117281"   "5122781"   "5140220"   "5482898"   "5485037"   "5581876"   "5725808"   "5745624"   "5847935"   "5857767"   "5953203"   "5977567"   "6045240"   "6220722"   "6325524"   "6376268"   "6428189"   "6455930"   "6480389"   "6483623"   "6518502"   "6634750"   "6634770"   "6692252").PN. OR ("7095053").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/12/20 15:33

## EAST Search History

S60	3136	"257"/\$.ccls. and (copper) and ((aluminum adj (oxide or nitride)) or ceramic or (silicon adj nitride)) and (light adj emit\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 16:40
S61	1594	"257"/\$.ccls. and (copper) and (((aluminum adj (oxide or nitride)) or ceramic or (silicon adj nitride)) with substrate) and (light adj emit\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 17:26
S62	165	"257"/\$.ccls. and (copper) same (((aluminum adj (oxide or nitride)) or ceramic or (silicon adj nitride)) with substrate) and (light adj emit\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 16:41
S63	0	("2005/0127387").URPN.	USPAT	OR	OFF	2006/12/20 16:52
S64	1	("6582643").PN. OR ("7053421").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/12/20 16:57
S65	20	("4321617").PN. OR ("4965659").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/12/20 17:07